

REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants:

1. Amend claims 1, 5, 7, 9-13, 20 and 21, without prejudice or disclaimer or without acquiescing in the rejections.
2. Cancel claims 2 and 8, without prejudice or disclaimer or without acquiescing in the rejections.
3. Respectfully traverse all rejections and objections.

B. PATENTABILITY OF THE CLAIMS

Claims 7, 14 and 17 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by JP 11-231730 to Tagawa ("Tagawa"). Claims 1, 5-6 and 19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of JP 2000-313533 to Masako ("Masako"). Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Masako and further in view of US 6,876,819 to Sawada ("Sawada"). Claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Masako and further in view of JP 57-160844 to Fukuda ("Fukuda"). Claim 4 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Masako and further in view of JP 2000-335784 to Nobusuke ("Nobusuke"). Claims 8 and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Masako. Claims 15-16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of US 6,726,197 to Aoki ("Aoki"). Claims 9-10, 18, 20 and 21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Sawada. Claims 11 and 23 stand rejected under 35 U.S.C. § 103(a) as allegedly being

unpatentable over Tagawa in view of Sawada and further in view of Masako. Claim 12 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Fukuda. Claim 13 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tagawa in view of Nobusuke. Claim 13 also stands objected-to as containing a double recitation of that which has already been recited in claim 7.

The objection and all prior art rejections are respectfully traversed. Without acquiescing in the rejections, claims 1, 5, 7, 9-13, 20 and 21 have been amended, and claims 2 and 8 have been canceled. The following discussion is directed to the claims as amended. Applicants reserve the right to file continuing applications to cover disclosed subject matter not encompassed by the currently pending claims.

1. Claims 7, 14 and 17

With respect to the rejection of claims 7, 14 and 17, independent claim 7 (from which claims 14 and 17 depend) has been amended to recite the additional features of “a paper feed cassette ejector configured to push out the paper feed cassette from an installed state toward an uninstalled state relative to a main body of the image forming apparatus” and “wherein said control portion is further configured to withhold said commencement of said image forming job by causing said paper feed cassette ejector to push out the paper feed cassette from an installed state toward an uninstalled state relative to the main body of the image forming apparatus.” Applicants respectfully submit that Tagawa does not disclose at least the newly recited features of claim 7 and therefore cannot anticipate claims 7, 14 and 17.

2. Claims 1, 5, 6 and 19

With respect to the rejection of claims 1, 5, 6 and 19, independent claim 1 (from which claims 5, 6 and 19 depend) has been amended to recite the features (from claim 2) that “said

image forming apparatus is configured to communicate with a terminal machine; ... said image forming apparatus has received said image forming request from said terminal machine; and ... said warning is provided at the terminal machine.” Applicants respectfully submit that neither Tagawa, Masako nor Sawada (which was cited against claim 2) – whether considered alone or in combination – discloses each and every feature of amended claim 1. For example, neither Tagawa, Masako nor Sawada appears to disclose the feature of an image forming apparatus providing, prior to commencement of an image forming job in response to an image forming request which the image forming apparatus received from a terminal machine, a warning at the terminal machine that the number of paper sheets contained in the paper feed cassette of the image forming apparatus is insufficient to complete the image forming job. Thus, the combination of Tagawa and Masako (even if further combined with Sawada) does not render claims 1, 5, 6, and 19 obvious.

3. Claim 3

With respect to the rejection of claim 3, Applicants respectfully submit that the cited combination of Tagawa, Masako and Fukuda does not remedy the deficiencies of the Tagawa/Masako combination with respect to claim 1 (from which claim 3 depends). Claim 3 is therefore patentable for at least the same reasons as claim 1.

4. Claim 4

With respect to the rejection of claim 4, Applicants respectfully submit that the cited combination of Tagawa, Masako and Nobusuke does not remedy the deficiencies of the Tagawa/Masako combination with respect to claim 1 (from which claim 4 depends). Claim 4 is therefore patentable for at least the same reasons as claim 1. Further, claim 4 recites that the paper feed cassette comprises “a matching portion made of metal that extends in the vertical

direction along the edge of the stored recording medium and matches the recording medium.”

The Office Action identifies the sheet residual quantity detection part 9 of Nobusuke as corresponding to the recited matching portion. Office Action at 8. However, the sheet residual quantity detection part 9 of Nobusuke appears to be outside of the sheet cassette 6 and does not appear to extend along an edge of the sheets 1 contained in the sheet cassette 6. Nobusuke at Abstract, Figs. 1-4. Thus, for at least this additional reason, Applicants respectfully submit that the cited combination of Tagawa, Masako and Nobusuke does not render claim 4 obvious.

5. Claim 22

With respect to dependent claim 22, the Office Action cites the combination of Tagawa and Masako and states that “Masako teaches an engaging mechanism that can switch between an engaged state and a released state of the paper feed cassette relative to the main body of the apparatus” Office Action at 9. As an initial point, although Masako discloses “pushing out the paper feed cassette from the installed condition . . . into a state where it is slightly projected from the device body,” Masako does not appear to disclose either of an “engaged” state or a “released” state. Masako at Abstract, Solution. In any event, Masako does not appear to disclose an image forming apparatus that is configured to withhold commencement of an image forming job by switching between an engaged state and a released state of the paper feed cassette. Further, Masako does not appear to disclose the feature (recited in claim 7, from which claim 22 depends) of a control portion that is configured to withhold commencement of an image forming job by causing a paper feed cassette ejector to push out a paper feed cassette from an installed state toward an uninstalled state relative to a main body of an image forming apparatus.

Rather, Masako appears to disclose only that the paper feed cassette is pushed out “[w]hen the paper feed cassette is emptied of recording paper.” Masako at Abstract, Solution.

Thus, it seems very likely that the push-out could occur after commencement of an image forming job. In contrast, claim 22 recites that commencement of the image forming job is withheld by causing the paper feed cassette ejector to push out the paper feed cassette from an installed state toward an uninstalled state relative to a main body of an image forming apparatus, irrespective of whether the paper feed cassette is actually emptied of paper sheets. Accordingly, Applicants respectfully submit that the cited combination of Tagawa and Masako does not render claim 22 obvious.

6. Claims 15 and 16

With respect to claims 15 and 16, Applicants respectfully submit that the cited combination of Tagawa and Aoki does not remedy the deficiencies of Tagawa with respect to claim 7 (from which claims 15 and 16 depend). Claims 15 and 16 are therefore patentable for at least the same reasons as claim 7. Furthermore, with respect to claim 16 specifically, Aoki does not appear to disclose a warning that comprises both a visual and an auditory warning. Thus, for at least this additional reason, Applicants respectfully submit that the cited combination of Tagawa and Aoki does not render claim 16 obvious.

7. Claims 9, 10, 18, 20 and 21

With respect to claims 9, 10, 18, 20 and 21, Applicants respectfully submit that the cited combination of Tagawa and Sawada does not disclose: at least an image forming apparatus in combination with a terminal machine, wherein a warning of insufficient paper is provided at the terminal machine (claims 9, 18 and 20); or at least an image-formation warning method, in which a terminal machine provides an image forming request to an image forming apparatus, and a warning of insufficient paper is provided at the terminal machine (claims 10 and 21).

Accordingly, Applicants respectfully submit that the cited combination of Tagawa and Sawada does not render claims 9, 10, 18, 20 and 21 obvious.

Further, claims 20 and 21 previously recited that the image forming request is the result of a first work and that the warning precedes commencement of a second work. The Office Action states that, “since a warning message appears before commencement of a first work when there are insufficient papers, then it must inherently appear before a second work.” Office Action at page 11. This statement appears to equate the first and second works of a user at the terminal machine with the image forming job of the image forming apparatus. As an initial point, and given that the claims recite the image forming request as being the result of a first work, it is not clear how “a warning message appears before commencement of a first work.” Furthermore, Applicants respectfully submit that the Office Action’s inherency argument is improper, at least because a warning could be provided before commencement of an image forming job by the image forming apparatus, yet after commencement of a second work by the user. In any event, and without acquiescing in any rejection, Applicants have amended claims 20 and 21 to explicitly recite that the first and second works are that of a user at the terminal machine.

8. Claims 11 and 23

With respect to claims 11 and 23, Applicants respectfully submit that the cited combination of Tagawa, Sawada and Masako does not remedy the deficiencies of the Tagawa/Sawada combination with respect to claim 10 (from which claims 11 and 23 depend). Claims 11 and 23 are therefore patentable for at least the same reasons as claim 10.

Further regarding claim 11, the Office Action states that “Masako discloses in drawing 2, the device comprising: a paper feed cassette ejector, 4, configured to push out the paper feed

cassette from an installed state toward an uninstalled state relative to a main body of the apparatus.” Office Action at 11-12. However, Masako does not appear to disclose the recited feature of withholding of commencement of an image forming job is accomplished by pushing out a paper feed cassette from an installed state toward an uninstalled state relative to a main body of a image forming apparatus. Rather, Masako appears to disclose only that the paper feed cassette is pushed out “[w]hen the paper feed cassette is emptied of recording paper.” Masako at Abstract, Solution. Thus, it seems very likely that the push-out could occur after commencement of an image forming job. In contrast, claim 11 recites withholding, if there is insufficient paper in the paper feed cassette, commencement of the image forming job by pushing out the paper feed cassette from an installed state toward an uninstalled state relative to a main body of the image forming apparatus, irrespective of whether the paper feed cassette is actually emptied of paper sheets. Accordingly, for at least this additional reason, Applicants respectfully submit that the cited combination of Tagawa, Sawada and Masako does not render claim 11 obvious.

Further regarding claim 23, the Office Action states that “Masako teaches pushing out a sheet cassette when there is an insufficient amount of sheets. Since it would be impossible to commence a printing job when the cassette isn’t in the installed state, the structure disclosed by the references above [Tagawa, Sawada and Masako] inherently carry out the recited functions.” Office Action at page 12. As an initial point, although Masako discloses “pushing out the paper feed cassette from the installed condition ... into a state where it is slightly projected from the device body,” Masako does not appear to disclose either of an “engaged” state or a “released” state. Masako at Abstract, Solution.

In any event, Masako does not appear to disclose withholding commencement of an image forming job by switching between an engaged state and a released state of a paper feed

cassette. Rather, Masako appears to disclose only that the paper feed cassette is pushed out “[w]hen the paper feed cassette is emptied of recording paper.” Masako at Abstract, Solution. Thus, it seems very likely that the push-out could occur after commencement of an image forming job, and Applicants respectfully submit that it is improper to conclude that the combination of Tagawa, Sawada and Masako results in a structure that inherently carries out the recited functions. In contrast, claim 23 recites withholding commencement of the image forming job by switching between an engaged state and a released state of the paper feed cassette, irrespective of whether the paper feed cassette is actually emptied of paper sheets. Thus, for at least this additional reason, Applicants respectfully submit that the cited combination of Tagawa, Sawada and Masako does not render claim 23 obvious.

9. Claim 12

With respect to the rejection of claim 12, Applicants respectfully submit that the cited combination of Tagawa and Fukuda does not remedy the deficiencies of Tagawa with respect to claim 7 (from which claim 12 depends). Claim 12 is therefore patentable for at least the same reasons as claim 7.

10. Claim 13

With respect to claim 13, Applicants respectfully submit that the cited combination of Tagawa and Nobusuke does not remedy the deficiencies of Tagawa with respect to claim 7 (from which claim 13 depends). Claim 13 is therefore patentable for at least the same reasons as claim 7. Further, claim 13 recites that the paper feed cassette comprises “a metal portion of said paper feed cassette that extends in the vertical direction along an edge of said one or more paper sheets contained in said paper feed cassette.” The Office Action identifies the sheet residual quantity detection part 9 of Nobusuke as corresponding to the recited metal portion. Office Action at 14.

However, the sheet residual quantity detection part 9 of Nobusuke appears to be outside of the sheet cassette 6 and does not appear to extend along an edge of the sheets 1 contained in the sheet cassette 6. Nobusuke at Abstract, Figs. 1-4. Thus, for at least this additional reason, Applicants respectfully submit that the cited combination of Tagawa and Nobusuke does not render claim 13 obvious.

C. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. Accordingly, reconsideration and withdrawal of the rejections is respectfully requested, and a formal indication of allowability is earnestly solicited.

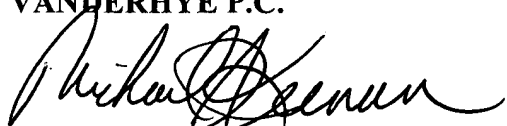
The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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